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10/032,895	10/19/2001	Christian Gheorghe	40205.2US01	8307

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MERCHANT & GOULD PC
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER	
HAMZA, FARUK	
ART UNIT	**PAPER NUMBER**
2155	

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/032,895	GHEORGHE ET AL.	
	Examiner	Art Unit	
	Faruk Hamza	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed on October 19, 2001. Claims 1-54 are now pending.

Claim Objections

2. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 22-28, 30-53 been renumbered 24-30 and 32-54.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 27 – 54 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. For a subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea of mathematical algorithm in the technological art. However the "recommendation system and producer modules" recited in the claims are not

computer readable. The claims have not been clearly tied to a technological art, environment or machine, which would result in a practical application.

5. Claims 28-30 and 32-54, incorporate the same deficiencies of their respective base claims and are rejected under the same rational.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

7. Claims 1-3, 6-11,14-25, 27-33, 35-42, 45-52 are rejected under 35 U.S.C. 102(a) as being anticipated by Oliver et al. (U.S. Patent Number 6,845,374) hereinafter referred as Oliver.

8. Oliver has disclosed:

- <Claim 1>

A recommendation system for delivering a list of recommendations to a requester system over a computer network, the recommendation system comprising:

a plurality of producer modules in communication with the requester system, each of the plurality of producer modules receiving a request for recommendations

a plurality of producer modules in communication with the requester system, each of the plurality of producer modules receiving a request for recommendations from the requester system and producing a list of initial recommendations in response thereto, each of the recommendations in a list of initial recommendations including a confidence level and a producer identifier; and (Fig. 1A; Column 4, lines 5-21)

a recommendation engine comprising:

a weighting module modifying each of the confidence levels in a given list of initial recommendations based on a weighting value associated with the producer module that produced the given list of initial recommendations; (Column 4, lines 32-36)

a recommendation module selecting one or more of the recommendations from the lists of initial recommendations based on the confidence levels of the recommendations to produce a list of survived recommendations that are transmitted to the recommender system; and (Column 4, lines 37-47)

an adjustment module adjusting the weighting values associated with each of the producer modules based on information from the requester system related to the list of survived recommendations transmitted to the requester system. (Column 4, lines 53-60)

- <Claim 2>

The recommendation system of claim 1, wherein the recommendation module further comprises:

an assembler module combining the lists of initial recommendations into a combined list of recommendations; (Column 4, lines 10-11)

a sorting module sorting the recommendations in the combined list of recommendations according to the confidence levels of each of the recommendations in the combined list of recommendations to produce a sorted list of recommendations; and (Column 4, lines 53-57)

a selection module selecting one or more survived recommendations from the sorted list of recommendations to produce the list of survived recommendations. (Column 4, lines 48-53)

- <Claim 3>

The recommendation system of claim 2, wherein the selection module:

selects a first predetermined number N of recommendations from the sorted list of recommendations; (Column 5, lines 60-67)

selects a second predetermined number M of recommendations from the first predetermined number N of recommendations, wherein the likelihood of a given one of the M recommendations being selected from the first predetermined number N of recommendations is related to the confidence level of the given one of the M recommendation; and (Column 6, 40-45)

selects the one or more survived recommendations from the second predetermined number of initial recommendations. (Fig. 9; 194)

- <Claim 6>

The recommendation system of claim 1, wherein the weighting module modifies each of the confidence levels in a given list of initial recommendations by multiplying each of the confidence levels in a given list of initial recommendations by the weighting value associated with the producer module that produced the given list of initial recommendations. (Column 4, lines 32-36)

- <Claim 7>

The recommendation system of claim 1, wherein each of the recommendations in a list of initial recommendations also includes an object identifier. (Column 1, lines 18-30)

- <Claim 8>

The recommendation system of claim 1, wherein at least one of the recommendations in a list of initial recommendations also includes a request identifier that identifies the request for recommendations from the requester system. (Column 1, lines 18-30)

- <Claim 9>

The recommendation system of claim 1, wherein at least one of the recommendations in one of the lists of initial recommendations also includes a session identifier that identifies a session on the requestor system. (Column 1, lines 18-30)

- <Claim 10>

The recommendation system of claim 1, wherein at least one of the recommendations in one of the lists of initial recommendations also includes a recommendation identifier that indicates the list of initial recommendations of which the recommendation was a part. (Column 4, lines 32-36)

- <Claim 11>

The recommendation system of claim 1, wherein at least one of the recommendations in one of the lists of initial recommendations also includes a uniform resource locator (URL). (Column 1, lines 18-30)

- <Claim 14>

The recommendation system of claim 12, wherein at least one of the recommendations in one of the lists of initial recommendations also includes an image. (Fig. 4; 138)

- <Claim 15>

The recommendation system of claim 1, wherein the request includes a requester agent. (Column 3, lines 61-65)

- <Claim 16>

  The recommendation system of claim 11, wherein the request includes a universal 25 resource locator key (URL Key). (Column 1, lines 18-30)

- <Claim 17>

  The recommendation system of claim 1, wherein the request includes a Site Identifier (site ID). (Column 1, lines 18-30)

- <Claim 18>

  The recommendation system of claim 1, wherein the request includes a tracking identification attribute (Track ID). (Column 1, lines 18-30)

- <Claim 19>

  The recommendation system of claim 17, wherein the Track ID is a session identifier. (Column 1, lines 18-30)

- <Claim 20>

  The recommendation system of claim 17, wherein the Track ID is a user identifier. (Column 1, lines 18-30)

- <Claim 21>

The recommendation system of claim 1, wherein the request includes a request number (RecCount) indicating a number of request to be transmitted to the requester system. (Column 1, lines 18-30)

- <Claim 22>

A relevant object determination system for delivering relevant objects over a computer network to a requester system having one or more users in contact therewith, comprising:

a first producer module and a second producer module, each of the first and second producer modules receiving a request for relevant recommendations from the requester system, the first producer module producing a first list of recommendations in response to the request for relevant recommendations and the second producer module producing a second list of recommendations in response to the request for relevant recommendations, each recommendation including an object identifier, a confidence level, and a producer identifier; and (Fig. 1A; Column 4, lines 5-21)

a recommendation engine comprising:

a weighting module modifying the confidence level in each recommendation in the first list of recommendations based on a first weighting value and modifying the

confidence level in each recommendation in the second list of recommendations based on a second weighting value; (Column 4, lines 32-36)

a recommendation module, selecting a predetermined number of the recommendations, the recommendation module delivering to the requester system objects identified by the object identifiers in the predetermined number of recommendations and the producer identifiers in the predetermined number of recommendations; and (Column 4, lines 37-47)

an adjustment module adjusting the first weighting value and the second weighting value based on inputs from the requester system indicative of reactions of the one or more users to objects sent from the recommendation module to the requester system. (Column 4, lines 53-60)

- <Claim 23>

The relevant object determination system of claim 20, wherein the recommendation module further comprises:

an assembler module combining the first list of recommendations and the second list of recommendations into a combined list of recommendations; (Column 4, lines 10-11)

a sorting module sorting the combined list of recommendations to produce a sorted list of recommendations; and (Column 4, lines 53-57)

a selection module selecting from the sorted list of recommendations the predetermined number of recommendations. (Column 4, lines 48-53)

- <Claim 24>

The relevant object determination system of claim 21, wherein the sorting module sorts the recommendations in the combined list of recommendations according to confidence levels. (Column 4, lines 61-67; Column 5, lines 1-3)

- <Claim 25>

The relevant object determination system of claim 22, wherein the selection module first selects N recommendations from the sorted list of recommendations and then selects the predetermined number of recommendations from the N selected recommendations, wherein the likelihood of a given one of the recommendations of the predetermined number of recommendations being selected from the N recommendations is related to the confidence level of the given one of the recommendations. (Column 5, lines 60-67)

- <Claim 27>

A method of adaptively weighing producer modules in a recommendation system employing a plurality of producer modules, each producer module having a weighting value associated therewith, the method comprising the steps of:

receiving one or more recommendations from each of the plurality of producer modules, each of the received recommendation including a producer identifier

indicating which producer module produced the received recommendation; (Column 4 lines 61-67; column 5, lines1-3)

transmitting a plurality of survived recommendations to a requester system, each of the survived recommendations being selected from the received recommendations; (Column 5, lines 1-3)

receiving information from the requester system related to the plurality of survived recommendations transmitted to the requester system; (Column 1, lines 51-55)

modifying each of the weighting value based on the information received from the requester system. (Fig. 7)

- <Claim 28>

The method of claim 25, wherein the information received from the requester system includes a plurality of user reaction values, wherein each of the plurality of user reaction values is associated with a different one of the plurality of survived recommendations transmitted to the requester system. (Column 1, lines 51-55)

- <Claim 29>

The method of claim 26, wherein each user reaction value is indicative of a positive user reaction to the recommendation to which the user reaction value is associated. (Column 1, lines 51-55)

- <Claim 30>

The method of claim 26, wherein each user reaction value is indicative of positive and negative user reactions to the recommendation to which the user reaction value is associated. (Column 1, lines 51-55)

- <Claim 31>

A method of producing a list of recommendations using a plurality of producer modules, each producer module having associated therewith a weighting value, the method comprising the steps of:

receiving a request for recommendations from a requester system; (Fig. 1A)

transmitting the request to a plurality of producer modules; (Fig. 12)

receiving a list of initial recommendations from each of the producer modules, every recommendation in a list of initial recommendations having a confidence level and a producer identifier; (Column 4 lines 61-67; column 5, lines1-3)

modifying each of the confidence levels in each of the lists of initial recommendations based on the weighting value associated with the producer module that produced the list of initial recommendations to produce a list of modified recommendations; (Fig. 7)

selecting a predetermined number of survived recommendations from the list of modified recommendations; (Fig. 8; 184)

transmitting the predetermined number of survived recommendations to the requester system; (Column 5, lines 1-3)

receiving feedback information from the requester system related to the predetermined number of survived recommendations transmitted to the requester system; and (Column 1, lines 51-55)

modifying each of the weighting values based on the feedback information received from the requester system. (Fig. 7)

- <Claim 32>

The method of claim 29, wherein the step of selecting a predetermined number of survived recommendations comprises the steps of:

sorting the list of modified recommendations according to the confidence levels of each of the recommendations in the list of modified recommendations to produce a sorted list of recommendations; and (Column 4, lines 53-57)

choosing the selected predetermined number of survived recommendations from the sorted list of recommendations. (Fig. 8; 184)

- <Claim 33>

The method of claim 30, wherein step of choosing the selected predetermined number comprises the steps of:

selecting a first predetermined number N of recommendations from the sorted list of recommendations; (Column 5, lines 60-67)

selecting a second predetermined number M of recommendations from the first predetermined number N of recommendations, wherein the likelihood of a given one

of the M recommendations from the first predetermined number N of recommendations being selected as a second predetermined number M of recommendations is related to the confidence level of the given recommendation; and (Column 6, lines 40-45)

choosing the selected predetermined number of survived recommendations from the second predetermined number M of initial recommendations. (Fig. 9; 194)

- <Claim 35>

The method of claim 29, wherein the step of modifying each of the confidence levels comprises multiplying each of the confidence levels in a given list of initial recommendations by the weighting value associated with the producer module that produced the given list of initial recommendations. (Column 5, lines 48-53)

- <Claim 36>

The method of claim 29, wherein each of the recommendations in a list of initial recommendations also includes an object identifier. (Column 1, lines 18-30)

- <Claim 37>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes a request identifier that identifies the request for recommendations from the requester system. (Column 1, lines 18-30)

- <Claim 38>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes a session identifier that identifies the session on the requestor system that motivated the initial request. (Column 1, lines 18-30)

- <Claim 39>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes a recommendation identifier that indicates the list of initial recommendations of which the recommendation was a part. (Column 4, lines 32-36)

- <Claim 40>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes a uniform resource locator (URL). (Column 1, lines 18-30)

- <Claim 41>

The method of claim 38, wherein the at least one of the recommendations in a list of initial recommendations also includes a uniform resource locator key (URL key) related to the URL. (Column 1, lines 18-30)

- <Claim 42>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes the address of a web page. (Column 1, lines 18-30)

- <Claim 45>

The method of claim 29, wherein at least one of the recommendations in a list of initial recommendations also includes an image. (Fig. 4, 138)

- <Claim 46>

The method of claim 29, wherein the request includes a requester agent. (Column 3, lines 61-65)

- <Claim 47>

The method of claim 29, wherein the request includes a standard universal resource identifier. (Column 1, lines 18-30)

- <Claim 48>

The method of claim 29, wherein the request includes a Site Identifier (site ID). (Column 1, lines 18-30)

- <Claim 49>

The method of claim 29, wherein the request, includes a tracking identification

attribute (Track ID). (Column 1, lines 18-30)

- <Claim 50>

The method of claim 29, wherein the Track ID is a session identifier. (Column 1, lines 18-30)

- <Claim 51>

The method of claim 29, wherein the Track ID is a user identifier. (Column 1, lines 18-30)

- <Claim 52>

The method of claim 29, wherein the request includes a request number (RecCount) indicating the predetermined number of survived recommendations to be transmitted to the requester system. (Column 1, lines 18-30)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 12,13,43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oliver et al. (U.S. Patent Number 6,845,374) as applied above, and further in view of Shtivelman (U.S. Patent Number 6,346,952).

11. With respect to claim 12 and 43,

Oliver teaches generating recommendation (Oliver, Column 4, lines 30-31). It doesn't explicitly teach including title of web page.

However, Shtivelman in an analogous art teaches adding title of web page. (Shtivelman, Column 20, lines 7-13).

12. With respect to claim 12 and 43, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the system of Oliver by adding the function to include web page title that allows a user to have the system with greater portability. The incorporation of the function to include web page title in Oliver would make the system versatile. (Shtivelman, Column 3, lines 18-20)

13. As to claim 13 and 44, rational given above applied in addition Shtivelman teaches:

- <Claim 13>

The recommendation system of claim 12, wherein at least one of the recommendations in one of the lists of initial recommendations also includes a summary of the web page being recommended. (Shtivelman, Column 20, lines 7-13).

- <Claim 44>

The method of claim 41, wherein the at least one of the recommendations in a list of initial recommendations also includes a summary of the contents of the web page. (Shtivelman, Column 20, lines 7-13).

Allowable Subject Matter

14. Claims 4,5,26,34,53 and 54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure

- Jacobi et al. (U.S. Patent Number 6,064,980) discloses a system for collaborative recommendations.

- Aggarwal et al. (U.S. Patent Number 6,360,227) discloses a system for content-based recommendations.
- Tenorio (U.S. Patent Number 6,708,174) discloses a system and method for retrieving information according to improved matching criteria.
- Amerga et al. (U.S. Patent Number 6,819,931) discloses method for assigning tracking elements to received signal.
- Hofmann et al. (U.S. Patent Number 6,687,696) discloses system for personalized search, information filtering, and for generating recommendations.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached at 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155

HOSAIN ALAM
SUPERVISORY PATENT EXAMINER